DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Part 1910

[Docket No. OSHA-2008-0012]

RIN 1218-AC40

Tree Care Operations

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Advance Notice of Proposed Rulemaking.

SUMMARY: OSHA is requesting data, information, and comment on tree care operations, including hazards, fatalities, and control measures, that the Agency can use in developing a proposed standard to control hazards and reduce injuries in those operations.

DATES: Comments must be submitted (postmarked, sent, or received) by [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments, identified by Docket No. OSHA-2008-0012, by any of the following methods:

Electronically: You may submit comments and attachments electronically at *http://www.regulations.gov*, which is the Federal eRulemaking Portal. Follow the instructions online for submitting comments.

Fax: If your comments, including attachments, do not exceed 10 pages, you may fax them to the OSHA Docket Office at 202-693-1648.

Mail, hand delivery, express mail, messenger or courier service: You must submit three copies of your comments and attachments to the OSHA Docket Office, Docket No. OSHA-2008-0012, Room N-2625, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone 202-693-2350 (TTY number 877-889-5627). Deliveries (hand, express mail, messenger or courier service) are accepted during the Department of Labor's and Docket Office's normal business hours, 8:15 a.m. – 4:45 p.m., e.t.

Instructions: All submissions must include the Agency name and the OSHA docket number (Docket No. OSHA-2008-0012). Because of security-related procedures, submissions by regular mail may result in significant delay in their receipt. Please contact the OSHA Docket Office at the above address for information about security procedures for submitting comments by hand delivery, express delivery, and messenger or courier service.

All comments, including any personal information you provide, are placed in the public docket without change and may be made available online at *http://www.regulations.gov*. Therefore, OSHA cautions you about submitting certain personal information, such as social security numbers and birthdates. For further information on submitting comments, see the "Public Participation" heading in the SUPPLEMENTARY INFORMATION section of this document.

Docket: To read or download comments submitted in response to this **Federal Register** notice or other materials in the docket, go to Docket No. OSHA-2008-0012 at *http://www.regulations.gov* or the OSHA Docket Office at the address above. All documents in the docket are listed in the *http://www.regulations.gov* index, however,

some information (for example, copyrighted material) is not publicly available to read or download through the Website. All submissions, including copyrighted material, are available for inspection and copying at the OSHA Docket Office.

Electronic copies of this **Federal Register** notice are available at *http://www.regulations.gov*. This notice, as well as news releases and other relevant information, also are available at OSHA's Web site at *http://www.osha.gov*.

FOR FURTHER INFORMATION CONTACT:

Press Inquiries: Jennifer Ashley, OSHA Office of Communications, Room N-3647, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone: 202-693-1999.

General and Technical Information: David Wallis, OSHA Directorate of Standards and Guidance, Office of Engineering Safety, Room N-3609, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210; telephone 202-693-2277.

SUPPLEMENTARY INFORMATION:

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I. Background

A. Hazards and accidents

Tree care operations, such as tree trimming and tree removal, can expose employees to a number of serious hazards. The dangers include falling from trees; being hit by falling trees or branches, flying objects or vehicular traffic; being cut by high-speed saws; being pulled into chippers; and coming into contact with energized power lines. These dangers are often associated with tree trimming and removal operations and related tasks; therefore, these operations are some of the key areas on which OSHA is focusing this Advance Notice of Proposed Rulemaking.

The hazards present in tree care operations have resulted in a significant number of serious accidents. For example, looking at fatal accidents in the tree services and ornamental shrubs industry sector (SIC 0783), just one of the industry sectors that perform tree care operations, the Bureau of Labor Statistics (BLS) reported that between 1992 and 2002[1] there were 637 fatalities.[2] That averages to 58 fatalities per year. The vast majority (75.6 percent) of those fatalities were falls, being struck by falling objects, and electrocutions, which are types of accidents most closely associated with tree trimming and removal operations. Falls and being struck by falling objects accounted for about one-third (32 percent) and one-quarter (26 percent) of the deaths, respectively. Contact with electric current resulted in 17.6 percent of the fatalities and transportation incidents also were significant causes of fatalities during that period.

According to BLS data, the annual number of fatalities in SIC 0783 increased between 1992 and 2002. In 2002, for instance, there were 70 fatalities, almost double the 36 reported in 1992. Moreover, during the last 3 years of the period, there were 70 or more fatalities each year. From 1992 to 2002, there was a significant increase in the number of fatalities in SIC 0783 resulting from being struck by falling objects and transportation incidents, including being struck by mobile equipment. Those types of

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[1] The most recent year for which data are available for SIC 0783 is 2002. The North American Industrial Classification System has replaced the Standard Industrial Code system. Under the NAICS system, SIC 0783 is now classified as a part of the landscape services sector (NAICS 561730).

[2] Source: Census of Fatal Occupational Injuries, Bureau of Labor Statistics (BLS) (*http://stats.bls.gov/iif/oshcfoi1.htm*). Data are derived from State death certificates and other sources and may include deaths of sole proprietors.

fatalities increased more than three-fold and five-fold, respectively. Also, during that period the number of fatalities in SIC 0783 among Hispanic employees more than quadrupled, increasing from 4 deaths in 1992 to 17 deaths in 2002. In 1992, 11 percent of the fatalities in SIC 0783 were Hispanic employees. By 2002, however, Hispanic employees accounted for 24 percent of all fatalities, which was significantly higher than the percentage of fatalities for Hispanic employees in private industry as a whole (15 percent).

Data from OSHA's Integrated Management Information System (IMIS) for SIC 0783 show similar results. From 1994-2007, fatalities resulting from falls (from trees or bucket trucks) and being struck by falling objects accounted for 28 and 29 percent of the fatal injuries, respectively. Contact with electric current and transportation accidents accounted for 20 and 9 percent of the fatalities, respectively.

Looking at fatalities associated with chipper operations, a hazardous task related to tree trimming and tree removal operations, seven percent of employee deaths reported in the BLS data resulted when an employee was pulled into a chipper or struck by the chipper hood or other part of the chipper. Similarly, 20 fatalities reported in the IMIS data during the past 10 years (1998-2007) occurred in chipper operations. Seventy percent of those deaths resulted when employees were caught and pulled into the chipper.

Injury data for SIC 0783 also indicate the hazardous nature of tree care operations. For example, in 2002 BLS reported an average annual injury rate of 7.6 cases

per 100 fulltime workers in SIC 0783, which was above the annual rate of 5.3 in private industry as a whole.[3]

B. Applicable standards

OSHA's logging operations standard (29 CFR 1910.266) covers limited types of tree removal operations, which are sometimes performed by firms primarily engaged in tree care services. In addition, there are a number of other OSHA general industry standards that apply to certain tree care operations, including:

- 29 CFR 1910.25 – Portable wood ladders;
- 29 CFR 1910.26 – Portable metal ladders;
- 29 CFR 1910.67 – Vehicle-mounted elevating and rotating work platforms;
- 29 CFR Part 1910.95 – Occupational noise exposure;
- 29 CFR 1910.106 – Flammable and combustible liquids;
- 29 CFR Part 1910 subpart I – Personal protective equipment;
- 29 CFR 1910.147 – Control of hazardous energy (lockout/tagout);
- 29 CFR 1910.151 – Medical services and first aid;
- 29 CFR 1910.180 – Crawler, locomotive, and truck cranes;
- 29 CFR 1910.184 – Slings;
- 29 CFR 1910.212 – General requirements for all machines [machine guarding];

[3] Source: BLS (*http://stats.bls.gov/iif/oshcfoi1.htm*).

- 29 CFR 1910.242 – Hand and portable powered tools and equipment;
- 29 CFR 1910.268 – Telecommunications;
- 29 CFR 1910.269 – Electric power generation, transmission, and distribution;
- 29 CFR 1910.331 to 1910.335 – Electrical safety-related work practices; and
- 29 CFR 1910.1200 – Hazard communication.

C. Events leading to this action

On May 10, 2006, the Tree Care Industry Association (TCIA) petitioned OSHA to promulgate a standard specific to tree care operations. In its petition, TCIA said a standard is needed because "tree care work is by its very nature one of the most hazardous occupations" and because existing OSHA standards do not adequately address those hazards. TCIA urged that OSHA develop a standard based on ANSI Z133.1 – 2006 *American National Standard for Arboricultural Operations – Safety Requirements.*

After analyzing the BLS and IMIS fatality and injury data, OSHA has decided to pursue rulemaking to address hazards in tree care operations. As the first step in the rulemaking process, OSHA is publishing this ANPR to gather data, information, and comment on hazards in tree care operations and effective measures to control hazards and prevent injuries and fatalities. In addition, OSHA is requesting comment on provisions a standard should include to effectively address those hazards. OSHA also will carefully consider the ANSI Z133.1 standard, as well as State occupational safety and health standards addressing tree care operations, in developing a standard.

II. Request for Data, Information, and Comments

OSHA is seeking data, information, and comment on hazards present in tree care operations and the measures to control those hazards and reduce the high accident, injury, and fatality rate, particularly in the operations of tree trimming and removal.

OSHA is interested in gathering a broad range of data, information, and comments related to a standard addressing tree care operations. OSHA invites comment on the questions in this notice, which include current employer and industry practices as well as the tasks, tools, equipment, machines, vehicles, processes, controls, and procedures involved in tree care operations. OSHA requests that you explain and provide data and information, including any studies or articles that support your comments.

Because OSHA intends to address tree care operations in whatever industry they may occur, OSHA is particularly interested in obtaining information about all kinds of businesses that may engage in tree care operations. Preliminarily, OSHA has identified tree care operations as primarily taking place among: (1) firms primarily engaged in tree care services (many of which belong to the Tree Care Industry Association and were formerly classified in SIC 0783); (2) utilities (electric power and telecommunications) that do their own tree trimming rather than contracting it out to others; and (3) municipalities and other local governments that provide tree care services to their constituents and on local government owned or operated properties such as parks and recreational areas. In addition, tree care operations may also take place in any firm with significant property management responsibilities, such as large property management firms or zoos, museums, and historic sites. OSHA tentatively plans to profile the industry, in large part, by identifying establishments that employ tree trimmers and

pruners (Standard Occupational Code 37-013). In 2006, there were 41,000 tree trimmers and pruners. OSHA invites comment on this approach. OSHA also requests information on who currently engages in tree care operations and how and to what extent this standard might affect them.

OSHA also invites comment on regulatory alternatives to reduce injuries and fatalities in tree care operations. In addition, OSHA invites comment on what requirements a standard addressing hazards in tree care operations should include and the potential costs and benefits of such a standard.

A. Tree care industry

1. Who performs tree care operation in the US? What industries are they in?How many entities, by industry, perform tree care operations in the United States? Which industries, other than the landscaping services industry, perform tree care operations that may be affected by a tree care operations standard? Are there tree care operations that do not employ employees classified as tree trimmers and pruners?
2. Please describe the job tasks involved in tree care operations and the hazards present in those tasks.
3. What types of tree care operations does your company (or a company representative of your industry) perform? What types of tree care operations comprise the largest part of your company's business? For example, how much of your business involves tree trimming operations and how much involves tree removal operations?

4. How many tree care companies in the United States primarily perform tree trimming and removal operations?
5. How many employees does your company (or a company representative of your industry) employ to perform tree care operations? Of those, how many are permanent employees and how many are temporary employees? What types of tree care operations do those employees perform?
6. To what extent does your company (or a company representative of your industry) rely on or use day laborers in tree trimming and removal operations? What tasks do they typically perform?

B. Accidents, injuries, and fatalities

1. How many and what types of accidents, injuries, and fatalities have been reported at your company or in the tree care industry during the past 5 years?
2. In what operations did those accidents, injuries, or fatalities occur, and what operations had the highest number of accidents, injuries, or fatalities?
3. What were the causes (for example, fall, struck by a vehicle or falling tree or limb, cut by chain saw or chipper, and electric shock) of the accidents, injuries, and fatalities? Please explain in detail.
4. What was the average number of days away from work for those injuries?
5. What was the average age and length of employment of the employees injured or killed during tree care operations?

C. Tree trimming

1. What types of tasks are involved in tree trimming operations and what hazards are present in those tasks?

2. In what setting does your company (or a representative company in your industry) usually perform tree trimming operations (for example, residential property, commercial property, public land, right-of-way, and near telecommunication or electric power lines)?
3. What vehicles, mobile equipment, portable powered hand tools, and other tools and equipment do employees use to perform tree trimming operations?
4. To what extent are tree trimming operations at your company or industry performed from aerial lifts, from ladders, in trees, or on the ground?
5. To what extent do employees at your company or industry get into the tree to perform tree trimming? How do they get into the tree and what equipment do they use to get up there?
6. How do you dispose of the branches and limbs? How are they moved to the street or other disposal area?
7. What controls and work safety practices has your company or industry implemented to protect employees performing or working near tree trimming operations?
8. What fall protection or other personal protective equipment (PPE) does your company provide to protect employees performing or working near tree trimming operations, including performing tree trimming operations from aerial lifts? Which employees receive PPE, what PPE do you pay for, and what does it cost?
9. What provisions and requirements should a standard include to protect employees from hazards in tree trimming operations?

D. Tree removal

1. What types of tasks are involved in performing tree removal operations and what hazards are present in those tasks?
2. In what setting does your company (or a representative company in your industry) usually perform tree removal operations (for example, residential property, commercial property, public lands, and near telecommunication or electric power lines)? How many trees does your company (or a representative company in your industry) typically remove on a single job or worksite?
3. How does your company or industry remove or cut down trees, particularly where space or clearance is an issue? Please explain in detail.
4. To what extent and in what circumstances does your company or industry remove trees solely using the piece-out method? To what extent and in what circumstances does your company or industry remove trees by cutting them down all at once at the stump?
5. What vehicles, mobile equipment, portable powered hand tools, and other tools and equipment do employees use to perform tree removal operations?
6. To what extent and in what circumstances does your company or industry use cranes to remove trees or tree segments?
7. How does your company dispose of tree trunks and trunk segments? How are they moved to the street or other disposal area?
8. What controls and workplace safety practices has your company or industry implemented to protect employees who perform or work near tree removal operations?

9. What types of fall protection and other PPE does your company provide to protect employees who perform or work near tree removal operations? Which employees receive PPE, what PPE do you pay for, and what does it cost?
10. What requirements should a standard include to protect employees from hazards in tree removal operations?

E. Portable powered hand tools, ladders, and other tools and equipment

1. What portable powered hand tools (for example, chain saws, and powered pole-mounted tools), ladders, and other tools (for example, cant hooks, chisels, chopping tools, and tongs) and equipment (for example, rope, climbing equipment, and wedges) does your company or industry use to perform tree care operations?
2. What types of chain saws does your company or industry use to cut tree branches and trunks?
3. What controls and safety mechanisms do these tools and equipment have to protect employees from accidents, injuries, and fatalities? What type of kickback protections or other safety mechanisms do the chain saws have to protect employees from being cut or otherwise injured? What do these controls and safety mechanisms cost?
4. What workplace safety practices has your company or industry implemented to protect employees who use or work near portable powered hand tools, chains saws, ladders, and other tools and equipment?
5. What PPE (for example, cut-resistant leg protection, head protection, and eye and face protection) does your company or industry provide to protect

employees who use or work near portable powered hand tools, and other tools and equipment? Which employees receive PPE, what PPE do you pay for, and what does it cost?

6. What type of training does your company or industry provide to employees before they are permitted to operate portable powered hand tools, and other tools and equipment? Which employees receive training and how frequently?
7. What provisions and requirements should a standard specific to tree care operations include to protect employees operating portable powered hand tools, and other tools and equipment?

F. Vehicles and mobile equipment

1. What types of vehicles and mobile equipment (for example, aerial lifts, sprayers, stump cutters, log loaders, cranes, and winches) does your company or industry use to perform tree care operations?
2. What types of controls and safety mechanisms do vehicles and mobile equipment have to protect employees operating these vehicles or mobile equipment? For example, does your company or industry use vehicles and mobile equipment that are equipped with safety equipment such as seat belts and falling object protective systems (FOPS)? What do these controls and safety mechanisms cost?
3. What workplace safety practices (for example, traffic cones and signs and traffic direction) has your company or industry implemented to protect employees operating or working near vehicles or mobile equipment? What safety work practices and procedures has your company or industry

implemented at jobsites to protect employees from on-road vehicular traffic in the area?

4. What PPE (for example, reflective vests) does your company or industry provide to protect employees while operating or working near vehicles or mobile equipment? Which employees receive PPE, what PPE do you pay for, and what does it cost?
5. What training does your company or industry provide for employees who operate vehicles or mobile equipment for tree care operations? Which employees receive training and how frequently?
6. What provisions and requirements should a standard specific to tree care operations include to protect employees operating or working near vehicles and mobile equipment? For example, should a standard require that employers use mobile equipment that is equipped with FOPS and seat belts?

G. Chippers

1. To what extent and in what circumstances does your company or industry perform chipping operations at tree trimming and removal worksites?
2. What types of chippers does your company or industry use?
3. What types of safety mechanisms (for example, safety control bar and hood locks or latches) do chippers have to prevent employees from being pulled into the machine or otherwise injured? What types of safety mechanisms do your chippers have and what do they cost?

4. What types of controls (for example, wooden push sticks) and workplace safety practices has your company or industry implemented to protect employees operating or working near chippers?
5. What types of PPE (for example, safety glasses, head protection, and gloves) does your company or industry provide to employees performing or working near chipper operations? Which employees receive PPE, what PPE do you pay for, and what does it cost?
6. What training does your company or industry provide for employees who perform or work near chipper operations? Which employees receive training and how frequently?
7. What requirements should a standard include to protect employees operating or working near chippers? For example, should a standard require that employers use chippers equipped with safety control bars?

H. General workplace safety practices and procedures

1. What general workplace safety and health practices or program has your company or industry implemented to protect employees who perform or work near tree care operations? Please describe in detail or submit a copy of the practices or program.
2. To what extent does your company (or a company representative of your industry) conduct hazard assessments before beginning a tree trimming or removal operation? Please describe in detail the hazard assessment process you use.

3. What workplace safety practices and procedures has your company or industry implemented to address environmental conditions (for example, thunderstorms, high winds, snow, and ice) that may pose a risk to employees?
4. What type of accident, near-miss, injury, and fatality records does your company or industry keep and analyze and to what extent does your company use these records to improve workplace safety and health practices or programs?

I. Training

1. What training does your company or industry provide to employees about safe performance of tree care operations? Which employees receive training and how frequently? What does the training cost?
2. What is the content of that training? Please describe in detail and submit a copy of training materials.
3. What training, if any, does your company provide for temporary employees, including day laborers? What is the content of that training and in what language is it provided? Please describe in detail and submit a copy of training materials.
4. To what extent does your company or companies in your industry hold regular safety meetings (for example, toolbox talks)? What do those safety meetings cover and how frequently are they held?
5. What training requirements should a standard include to protect employees performing tree care operations? Should a standard require that employers

train all employees, including temporary employees and day laborers, before permitting them to perform tree care operations or related tasks?

J. Medical services and first aid

1. What procedures has your company or industry implemented to ensure that injured employees receive timely and effective first aid and cardiopulmonary resuscitation (CPR) if they are injured?
2. What first aid and CPR training does your company or industry provide to employees? Which employees receive training and how frequently? How much does the training cost? If training is not provided, what alternatives are in place to ensure that employees receive timely first aid and CPR?
3. Does your company or industry have first aid kits at the workplace in the event an employee is injured? How many kits do you provide, where are they located, and what types of supplies do they contain? What do the first aid kits and supplies cost?
4. What requirements should a standard contain to address medical services, including first aid and CPR, to help employees who are injured during tree care operations? For example, should a standard include provisions requiring the employees have CPR training or that employers have an automated external defibrillator at the workplace?

K. National consensus standards

1. To what extent has your company or industry implemented the provisions and requirements in the ANSI Z133.1 standard and what were the costs? Please explain in detail.

2. What provisions or requirements in ANSI Z133.1 have been most effective in reducing injuries and fatalities at your company or in the industry?
3. What provisions in the ANSI Z133.1 standard, if any, have been difficult to implement at your company or in the industry?
4. What provisions or requirements in ANSI Z133.1 should OSHA include or not include in a standard on tree care operations? Please explain.
5. What provisions or requirements in other national consensus standards should OSHA include in a standard on tree care operations?

L. Economic impacts

1. What are the potential economic impacts associated with the promulgation of a standard to control hazards and reduce injuries and fatalities in tree care operations? Describe those impacts in terms of benefits from reduction in the number or severity of injuries and from changes in the costs of controls, medical costs, and training; effects on revenue and profit; and any other relevant impact measure. To the extent possible, quantify or provide examples of costs (for example, dollar estimates for controls).
2. What changes, if any, in market conditions would reasonably be expected to result from the promulgation of a standard on tree care operations? Describe any changes in market structure or concentration, and any effects on services that would reasonably be expected.
3. How many and what kinds of small entities perform tree care operations? What percentage of the industry do they comprise?

4. The Regulatory Flexibility Act requires that OSHA assess the impact of proposed and final rules on small entities (5 U.S.C 601 *et seq.*). OSHA requests that members of the small business community and others familiar with small business concerns address any special circumstances small entities face in controlling hazards and reducing injuries and fatalities in tree care operations. How and to what extent would small entities in your industry be affected by the promulgation of a standard that addresses hazards in tree care operations? Are there special circumstances that make the control of hazards in tree care operations more difficult or more costly in small entities? Describe those circumstances and explain and discuss any alternatives that might serve to minimize these impacts.
5. Are the reasons why the benefits of a standard to control hazards in tree care operations might be different for small entities than for larger establishments? Please explain.

III. Public Participation

You may submit comments in response to this document (1) electronically at *http://www.regulations.gov*, (2) by hard copy, or (3) by facsimile (FAX). All comments, attachments, and other materials must identify the Agency name and the docket number for this document (Docket No. OSHA-2008-0012). You may supplement electronic submissions by uploading document files electronically. If, instead, you wish to mail additional materials in reference to an electronic or FAX submission, you must submit three copies to the OSHA Docket Office (see ADDRESSES section). The additional

materials must clearly identify your electronic or FAX comments by name, date, and docket number so OSHA can attach them to your comments.

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Electronic copies of this **Federal Register** notice are available at *http://www.regulations.gov*. This document, as well as news releases and other relevant documents, are also available at OSHA's Web site at http://www.osha.gov.

IV. Authority and Signature

This document was prepared under the direction of Edwin G. Foulke, Jr., Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor. It is issued pursuant to sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657), 29 CFR part 1911, and Secretary's Order 5-2007 (72 FR 31159).

Signed at Washington, DC, this 15th day of September, 2008.

Edwin G. Foulke, Jr.,

Assistant Secretary of Labor for Occupational Safety and Health.

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